

PROCEDURAL GUIDOELINES FOR RELAXATION
OF NORMAL LEVEL OF TREATMENT FOR MUNICIPAL AND PRIVATE SEWAGE
WORKS DISCHARGING TO SURFACE WATERS

1.0 GENERAL

On a case-by-case basis, relaxation of the "normal" level of treatment down to a minimum of primary treatment will be permitted, but only after receiving water assessment results together with other environmental, social and economic factors have been considered and the relaxation justified.

Before a relaxation of the "normal" level of treatment will be formally considered, an "Application for the Approval of Sewage Works" shall be completed and submitted for evaluation along with the necessary supporting documentation. The owner, in the case of extensions to existing sewage treatment works, or the proponent, in the case of proposed new sewage treatment works, or the authorized agent of the owner/proponent (e.g. consultant), will complete and submit the application form. Persons proposing to make application for relaxation of the "normal" treatment requirements are advised to make their intentions known well in advance of the normal submission. This will ensure that the proponent is proceeding in the proper direction and may reduce problems and subsequent delays that may result after submission of the application for approval.

2.0 APPLICATION PROCEDURES

As noted above, the proponent should consult with the Region prior to making formal application. Pre-consultation provides the Region an opportunity to advise the proponent on the desirability and particulars of seeking a relaxation.

In the event the proponent wishes to proceed with application, the following should be adhered to:

1. Copies of the form "Application for the Approval of Sewage Works" should be obtained from the MOE District or Regional Office.

2. The application form should be filled out, with the assistance of the local MOE District Officer, if required.
3. The completed form (duplicate) should be signed and submitted along with the requested supporting documentation to the Director of the appropriate MOE Regional Office.
4. The Regional staff will review the application in consultation with the Environmental Approvals and Project Engineering and Water Resources Branches to ensure Province-wide consistency in granting relaxations of the "normal" level of treatment requirement. If deemed advisable by the Regional Office, the application may be reviewed by other interested parties such as the Ministry of Natural Resources, and the local Medical Officer of Health. The Regional Director will make a recommendation on the request for relaxation and forward it along with one copy of the application form and supporting information to the Director of Environmental Approvals and Project Engineering Branch for final review and processing.
5. If the application for relaxation is recommended for approval by the the Regional Director and has the concurrence of the Director of Water Resources Branch, technical aspects of the proposal will be reviewed and if acceptable, a Certificate of Approval will be issued under Section 24 of the OWR Act along with any necessary conditions, reasons for conditions and notices.
6. If the application for relaxation is not recommended for approval by the Regional Director or not approved by the Director of the Environmental Approvals and Project Engineering Branch, the applicant will be issued with a notice of refusal and reasons for refusal by the Director of Environmental Approvals and Project Engineering Branch.

The information which must accompany a request for a relaxation of the "normal" level of treatment requirement is discussed in the following sections.

3.0 SUPPORTING DOCUMENTATION FOR RELAXATION OF NORMAL LEVELS OF TREATMENT

3.1 General Considerations

The information requested below must be received in addition to the information requested in the latest version of the Ministry document "A Guide on Applying for the Approval of Sewage Works". If this application for relaxation is being made before final plans and specifications are prepared, as will normally be the case, the applicant should indicate that "conditional" approval is being requested and supply the information required for such an approval. If final plans and specifications are prepared, the applicant may request final approval by indicating so on the application form and by supplying the necessary information. Experimental approval will not generally be considered for applications for relaxation of the "normal" level of treatment.

The onus of justifying a relaxation of treatment requirement rests with the proponent. The undertaking of the necessary economic, social and environmental studies and the interpretation of the studies' findings will be the proponent's responsibility.

The following outlines the supplementary information which must be provided with an application for a relaxation of the "normal" level of treatment requirements.

3.2 Supplementary Information Requirements

3.2.1 Economic Impact

There should be a substantial economic benefit afforded by the use of a lower level of treatment. The proponent must justify that there is sufficient difference in cost between the "normal" level of treatment and the proposed alternative. The current and future utility rates relating to sewage treatment for the "normal" level of treatment and the proposed treatment should be identified.

3.2.2 Other Impacts

The proponent should also indicate potential reduction of social impacts (e.g. reduced community disruption) or environmental impacts that result from relaxation of treatment requirements.

3.2.3 Receiving Water Assessment Studies

1) Waste Loadings

The sources of wastewater and expected influent and effluent quality and flows should be identified. Actual sampling data should be provided as available and supplemented as necessary with data from similar facilities operating elsewhere. The possibility of sewage containing high strength organic wastes, heavy metals or toxic materials not easily removed by primary treatment, must be considered. Technical advice and guidance can be obtained, upon request, from the Ministry's Regional Offices, Water Resources Branch and Wastewater Treatment Section, Laboratory Services and Applied Research Branch..

2) Receiving Water Characteristics

The characteristics of the receiving waters shall be considered in the assessment, including the following details:

- a) type of outfall and its location in the receiving water body, including hydraulic design details (such as pipe diameter, port size and spacing, etc.);
- b) initial mixing and dilution of effluent with the receiving water;
- c) mixing zone boundary;
- d) assessment studies beyond the mixing zone boundary;
- e) for river discharges, consideration should be given to background water quality, temperature and flow variations, and downstream water uses;
- f) for lake discharges, consideration shall be given to the outfall depth, currents, thermal stratification, bottom characteristics, and nearby water uses.

The foregoing receiving water assessment procedures must be technically sound and acceptable to the Ministry. Technical advice and guidance on procedures will be provided on request by the Ministry's Water Resources Branch, or Regional Offices' Technical Support Sections, or from published procedures such as, "Stream Water Quality Assessment Procedures Manual", March 1980, Ministry of the Environment, Water Resources Branch.

In certain cases, receiving water assessment studies may have been recently carried out by the Ministry and, if so, all pertinent information will be made available to the proponent.

3.2.4 Compliance with Objectives

Based upon the receiving water assessment, the resultant water quality in the mixing zone and beyond should be defined as affected by the processes of dilution, assimilation, dispersion and transport. The techniques or models used to define the resultant water quality should be identified in the proposal. This quality should be consistent with the requirements outlined in the Ministry of the Environment publication "Water Management Goals, Policies, Objectives and Implementation Procedures", the "Canada - Ontario Agreement on Great Lakes Water Quality" and applicable Ontario policies. Only if these requirements are satisfied, can recommendations be made to accept less than the "normal" level of treatment.